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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,742	06/27/2003	Yao Wang	EMC-01-183CIP1	7763
24227	7590	09/06/2006	EXAMINER	
EMC CORPORATION OFFICE OF THE GENERAL COUNSEL 176 SOUTH STREET HOPKINTON, MA 01748			BELL, CORY C	
			ART UNIT	PAPER NUMBER
			2164	

DATE MAILED: 09/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/608,742	Applicant(s) WANG ET AL.	
	Examiner Cory C. Bell	Art Unit 2164	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 6/19/2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


SAM RIMELL
PRIMARY EXAMINER

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-18 have been examined.

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-6, 9-15, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent Number 6757696, known hereafter as Multer.

5. Claims 1 and 10 are rejected for the following reasons:

1. A computer architecture for managing resources for replication of data stored in a

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data storage environment including at least two data storage systems, and wherein data is replicated from one of the at least two data storage systems to at least one other data storage system of the at least two data storage systems, the architecture comprising: a data replication management server(*Col 31 line 24-36*); one or more data replication management software agents in communication with at least one of the two data storage systems and the data replication management server(*Col 31 lines 27-29, device engines are the software agents*), the agents being configured for performing data replication operations in response to commands from the data replication management server(*Col 31 lines 29-36*), wherein server commands to each of the software agents are sent over a network in accordance with an IP protocol(*Col 31 lines 21-23, Http is an IP protocol*); and one or more data replication management clients(*each device engine represents a client to the management server*) that may include a software application that uses data that is replicated by commands from the server to the software agent(*Although this limitation is optionally recited and thus non-limiting it can be found in Col 42 lines 38-45*).

The instant limitation of “said data being replicated on a volume basis” can be found in col 4 lines 33-44, col 5 lines 1-6, which clearly show the data being replicated on a volume basis using the broadest reasonable interpretation.

6. Claims 2 and 11 are rejected for the following reasons:

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Col 4 lines 36-43 teaches the client having “Microsoft Windows NT” which is a GUI which the client inherently communicates to the Server through.

7. Claims 3-4 and 12-13 are rejected for the following reasons:

Col 31 lines 24-36 teaches the system using lock (or switches) to control read and write access between the software agents and the data storage, as they control read and write access the determine the direction of the flow of data from one source to another, and show that the server controls the replication. Claim 4 is also non-limiting as it is an intended use claim.

8. Claims 5 and 14 are rejected for the following reasons:

The architecture of Claim 4, wherein the server stores configuration information for replicationI(*The system inherently must contain lock information*), security(*The server must inherently contain SSL configuration information Col 31 line 21-23*) and other configuration settings for the one or more software agents(*Col 31 lines 37-42*) and the one or more clients(*Col 31 lines 58-50*) in the data storage environment.

9. Claims 6, 9, and 15 are rejected for the following reasons:

The architecture of Claim 5, wherein communication between the server and the one or more clients is encrypted for security purposes. (*Col 31 21-23*)

10. Claim 18 is rejected for the following reasons:

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See claim 1 and 10 rejection. The system also inherently contains agents configured with a computer-executable program for performing data replication operations in response to commands, as the software agents that are inherently contained on the storage servers must be able to implement locks in response to server commands(*Col 31 lines 27-36*).

Claim Rejections - 35 USC § 103

11. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

12. Claims 7-8, and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6757696, known hereafter as Mutler in view of US Patent Number 5751813, known hereafter as Dorenbos.

13. Claims 7-8 and 16-17 are rejected for the following reasons:

Mutler covers the claims upon which claim 6 is dependant, but fails to teach using encryption using 129 bit keys or greater. Dorenbos teaches the use of keys up to 1024 bits to encrypt messages (*Col 1 lines 20-33*). Thus, it would have been obvious to one of ordinary skill in the art to encrypt messages using 1024 bit keys due to the advantages that a larger key provides better protection for data which clients or the server may wish to keep private.

Response to Arguments

14. As per the rejection to the claims under 35 USC 112 2nd paragraph, they , along with the objections to the claims have been withdrawn in light of applicants amendments.

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15. As per the rejection of the claims under 35 USC 102 and 103 the applicants arguments are incorrect, the examiner cites relevant portions of Multer that teaches the replication being on a volume basis in the rejection of claim 1 above.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cory C. Bell whose telephone number is (571) 272 2736. The examiner can normally be reached on m-f 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571) 272 4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



SAM RIMELL
PRIMARY EXAMINER